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REMARKS

Applicants appreciate the Examiner's thorough review of the Application and the indication that Claim 26 has been allowed.

Claims 1-5, 10, 17-31, 33, 35-39, 42-47, and 49-51 were previously pending in the present Application. Of these, Claims 27-31, 33, 35, 43, 45, 47, and 49-51 have been withdrawn. Claims 10, 36-39, 42, 44, and 46 have been cancelled, Claims 1 and 17 have been amended, leaving Claims 1-5 and 17-26 for further consideration in the present amendment.

Support for the amendment to Claim 1 can at least be found in paragraphs [0050]-[0058] of Applicants' original application. Support for the amendment to Claim 17 can be found in original Claim 20. No new matter has been introduced by these amendments.

Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-5, 10, 36-39, 46 and 48 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 6,004,617 to Schultz. Applicants respectfully traverse this rejection.

Claims 10, 36-39, 46, and 48 have been cancelled. Accordingly, the rejection applied to these claims has been rendered moot in view of the cancellation thereof.

Independent Claim 1 is directed to a system for creating a combinatorial coating library. The system comprises a plurality of coating materials suitable for forming at least one coating layer; a controller operable for controlling quantities of the plurality of coating materials; a mixer operable for mixing the plurality of coating materials; one or more substrate comprising a plurality of predefined regions operable for receiving the plurality of coatings; a coating system operable for delivering the plurality of materials to the substrate either incrementally or continuously; a spatial mask; a curing system operable for providing a plurality of curing environments; a thermal gradient curing element; and a testing device; wherein the combinatorial

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coating library comprises a predetermined combination of at least one of the plurality of coating materials and at least one of the plurality of curing environments associated with each of the plurality of predefined regions; and wherein the thermal gradient curing element has a constant or variable temperature distribution along a dimension of the thermal gradient curing element.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Schultz fails to anticipate Claim 1 because Schultz fails to disclose a spatial mask disposed between the curing system and the substrate as claimed by Applicants, wherein the spatial mask comprises a variable transmissivity for a curing medium produced by the curing system. In Schultz, reference to the term "mask" is in relation to the metering of materials onto the substrate.

Accordingly, the rejection applied to Claim 1 is requested to be withdrawn. Given that Claims 2-5 further limit Claim 1, these claims are patentable over Schultz for at least the same reasons.

Claim Rejections Under 35 U.S.C. § 103(a)

A. The rejection of Claims 44 and 46 under 35 U.S.C. § 103(a) as allegedly unpatentable over Schultz has been rendered moot in view of the cancellation thereof.

B. Claims 17-19, 21-22, 25 and 42 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Schultz in view of U.S. Patent No. 4,390,615 to Courtney et al. Applicants respectfully traverse this rejection.

Claim 42 has been cancelled and, as such, the rejection applied to this claim has been rendered moot.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would

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have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Independent Claim 17 is directed to a system for creating a combinatorial coating library, comprising a curing system. The curing system comprises, *inter alia*, a spatial mask having an elongate surface positioned between a curing source and the at least one coating layer, wherein a radiation transmission characteristic varies along a dimension of the elongate surface of the spatial mask.

Schultz fails to teach or suggest the spatial mask as claimed. Rather, Schultz is directed to masks for metering material onto a substrate. This is markedly different from a spatial mask having variable radiation transmission characteristics for a curing system. In the most recent Office Action (paper no. 14), the Examiner also acknowledges that the Schultz mask is used "to aid in depositing coating material on only certain predetermined regions of the substrate". As such, the mask disclosed in Schultz is disposed between the delivery system and the substrate. The Examiner's reference to Schultz's disclosure of employing different heat histories is not sufficient to establish a prima facie case of obviousness. There is no teaching or suggestion of a spatial mask positioned between the curing system and the substrate, wherein the spatial mask has varying radiation transmissivities. Rather, Schultz suggests modulating the curing system to elicit different heat histories, e.g., "different heat histories using, for example, laser thermolysis, wherein bursts of energy of a predetermined duration and intensity are delivered to target regions on the substrate." (Schultz, Col. 27, ll. 24-29). Thus, in this example, the different heat histories are obtained by varying the duration and intensity of thermolysis. This is markedly different from a system comprising, *inter alia*, a spatial mask having an elongate surface positioned between a curing source and the at least one coating layer, wherein a radiation transmission characteristic varies along a dimension of the elongate surface of the spatial mask. Courtney fails to compensate for the deficiencies of Schultz.

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Accordingly, Claim 17 is patentably distinguished over the cited references. Because Claims 18-19, 21-22, and 25 variably depend from Claim 17 and include all of the limitations of the base claim, these claims are also patentably distinguished over the cited references.

C. Claims 23 and 24 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Schultz in view of U.S. Patent No. 5,200,230 to Poullos et al. Applicants respectfully traverse this rejection.

Claims 23 and 24 depend from independent Claim 17. As such the curing system of Claims 23 and 24 features, *inter alia*, a spatial mask having an elongate surface positioned between a curing source and the at least one coating layer, wherein a radiation transmission characteristic varies along a dimension of the elongate surface of the spatial mask.

For reasons previously discussed, Schultz fails to teach or suggest a system including a spatial mask as claimed by Applicants. Poullos fails to compensate for the deficiencies of Schultz. Although Poullos makes reference to diffraction gratings and a scanning optical corrector, there is no disclosure or suggestion of the spatial mask claimed by Applicants. As such, the combination of cited references fail to establish a prima facie case of obviousness and the rejection of Claims 23 and 24 should be withdrawn.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

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If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Cantor Colburn LLP.

Respectfully submitted,

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